

Overview of the Public Health Burden of Prescription Drug and Heroin Overdoses

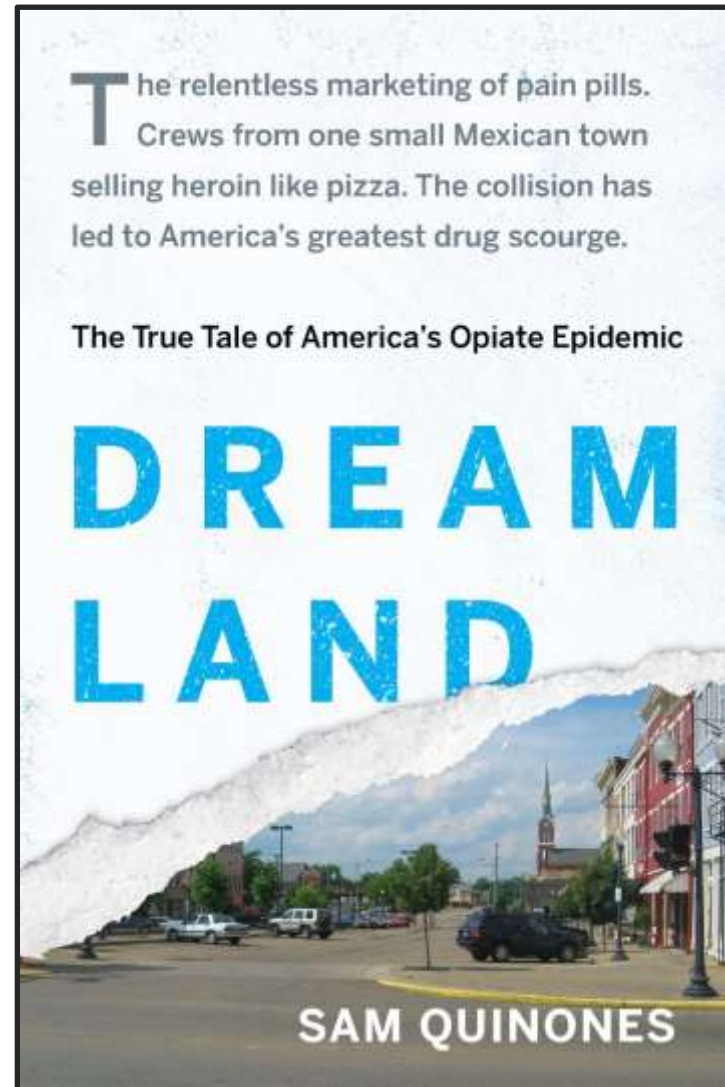
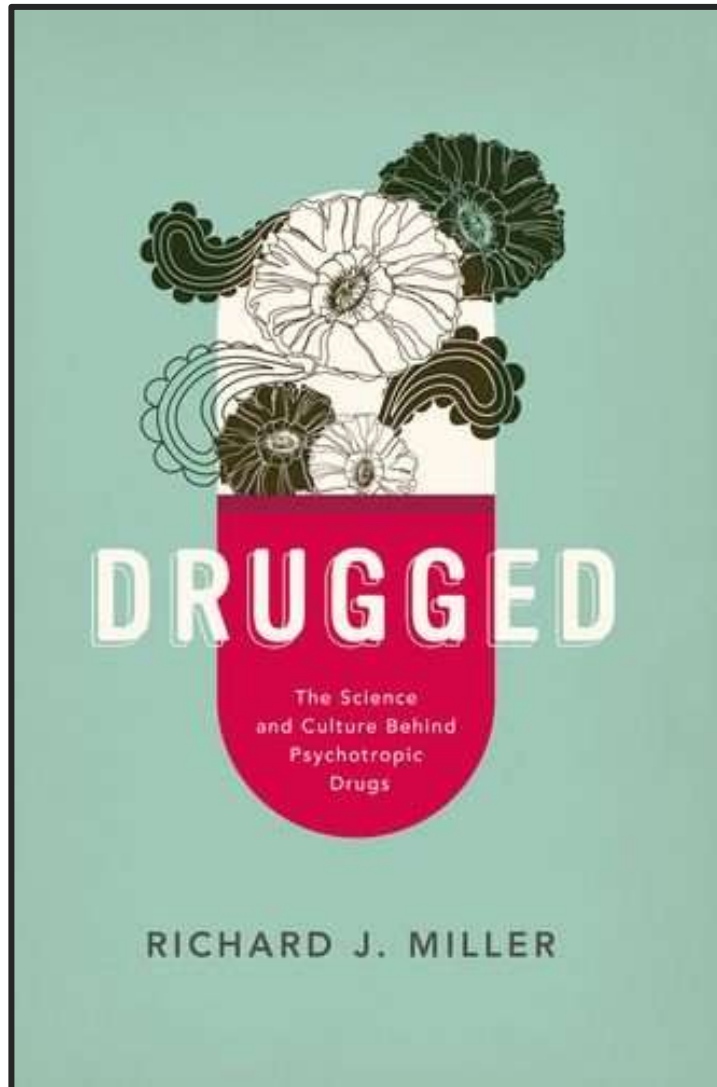
Grant Baldwin, PhD, MPH

July 1, 2015

**National Center for Injury Prevention and Control
Division of Unintentional Injury Prevention**



How We Got to Now?





145,000

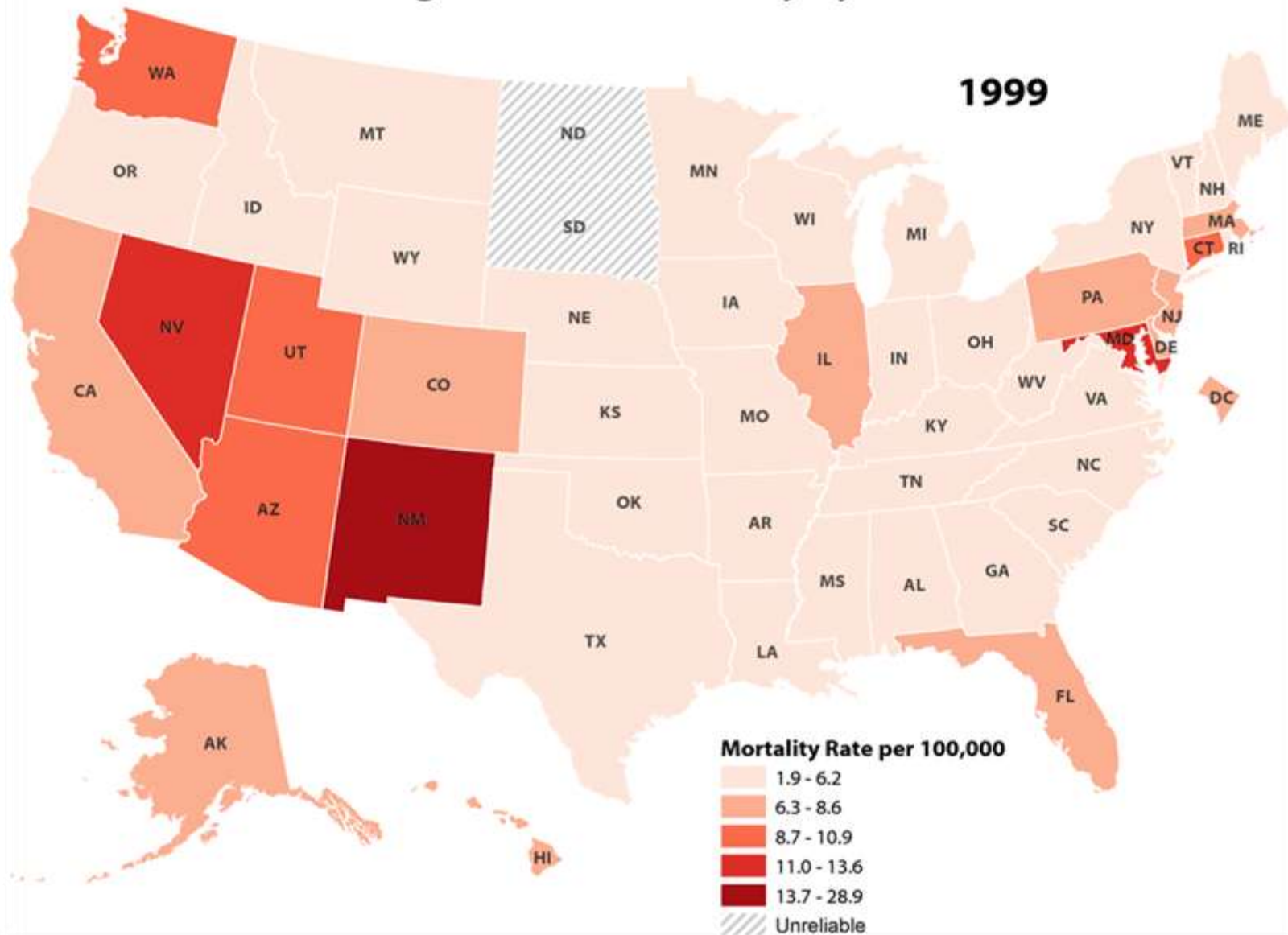
Rx opioid deaths in 10 years.

4x as many deaths

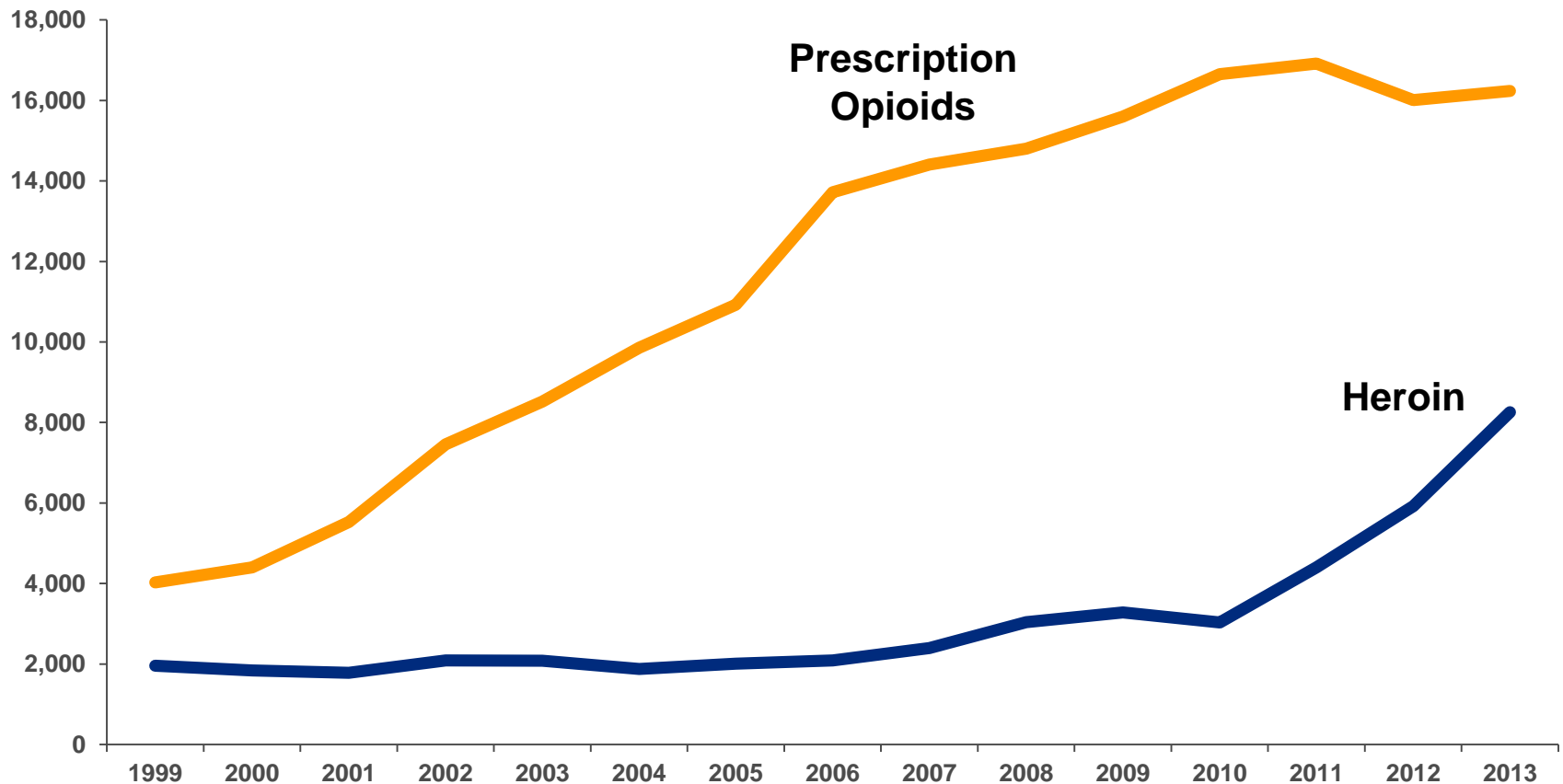
In 2013 as 1999.

Drug Overdose Mortality by State

1999





Rise in Rx overdose deaths since 1999 and recent increase in heroin deaths



CDC, National Center for Health Statistics, National Vital Statistics System

For every  Rx opioid overdose death in 2011,
there were...

 **12** treatment admissions for opioids

 **25** emergency department visits for opioids

 **105** people who abused or were dependent on opioids

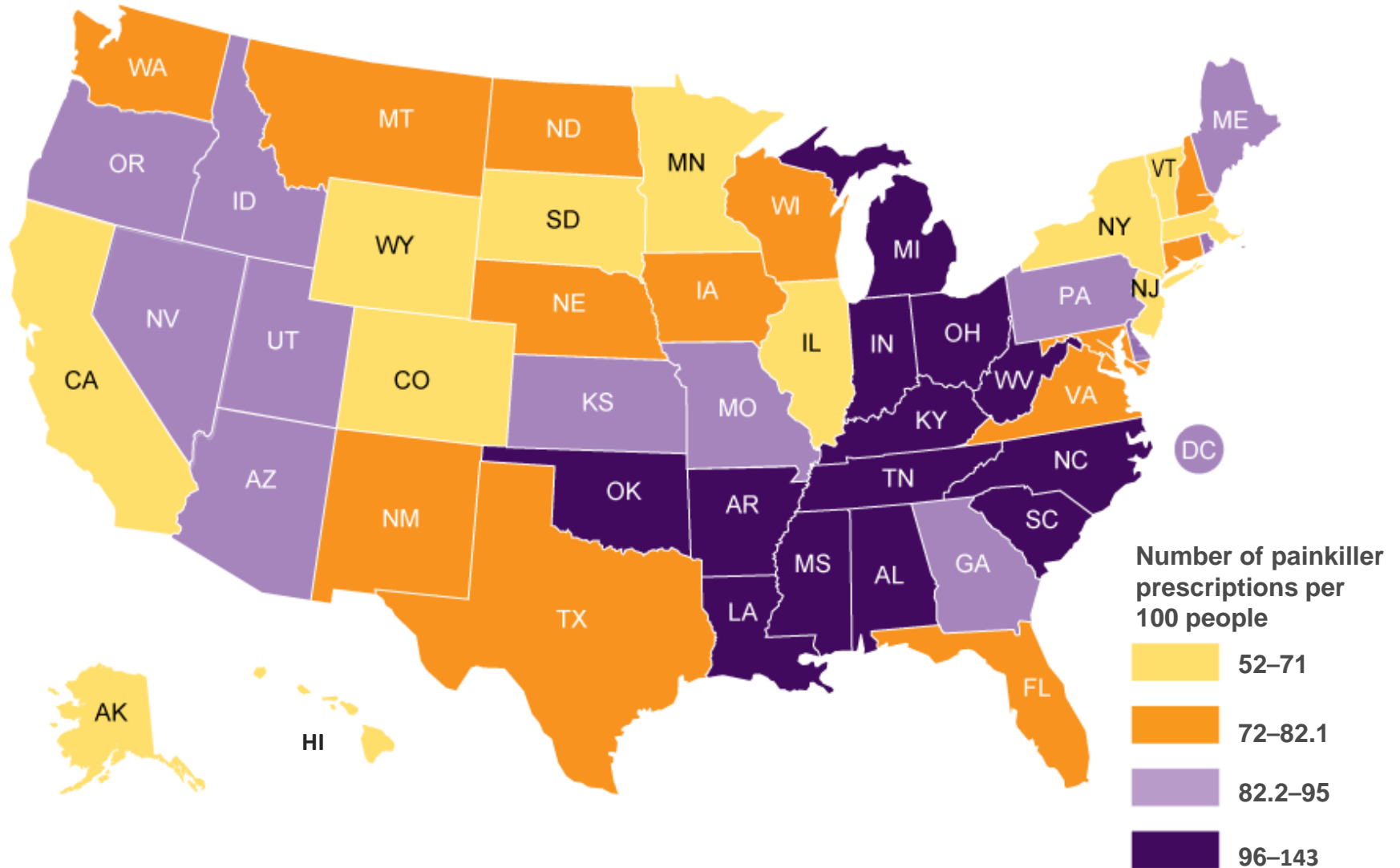
 **659** nonmedical opioid users



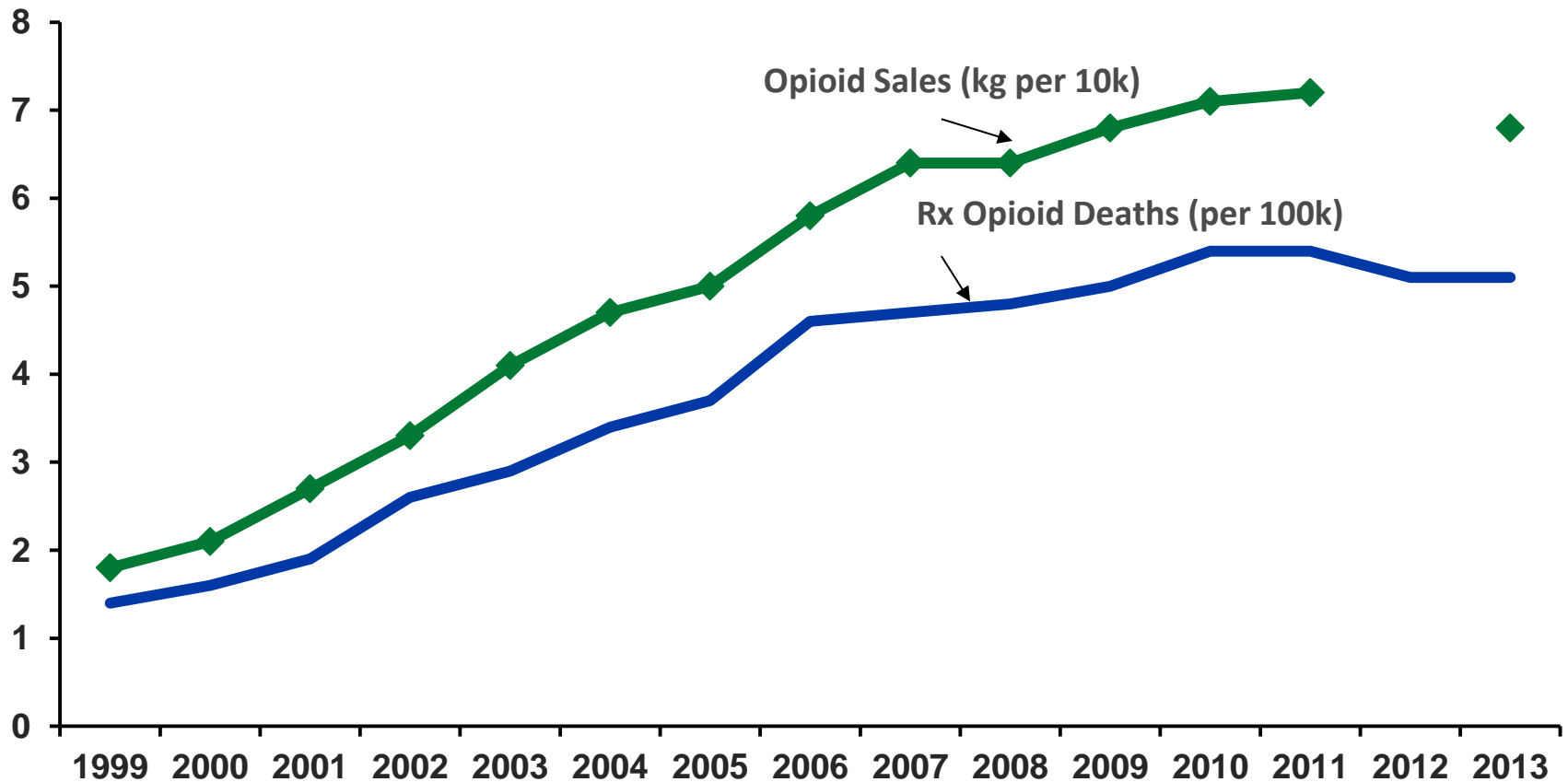


Quarter billion
opioid prescriptions in 2012

Opioid prescribing can vary 3-fold between states

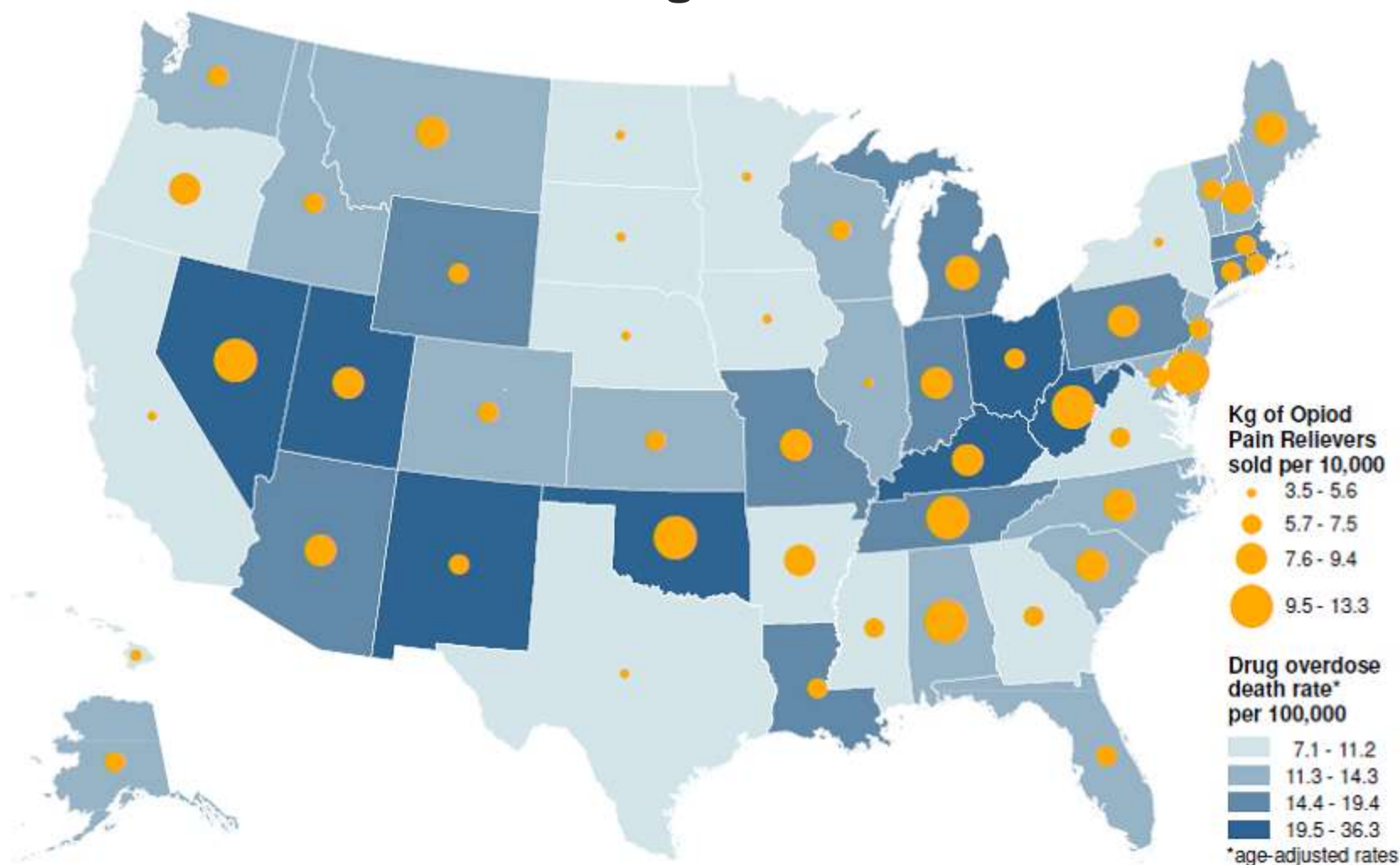


Sharp increases in opioid prescribing coincides with sharp increases in Rx opioid deaths



National Vital Statistics System, DEA's Automation of Reports and Consolidated Orders System.

States with more opioid pain reliever sales tend to have more drug overdose deaths



Death rate, 2013, National Vital Statistics System. Opioid pain reliever sales rate, 2013, DEA's Automation of Reports and Consolidated Orders System

The Role of Opioid Prescribing

Upper Midwest



Appalachia





CA Workers Compensation Program

**A small fraction of
prescribers fueling the problem**

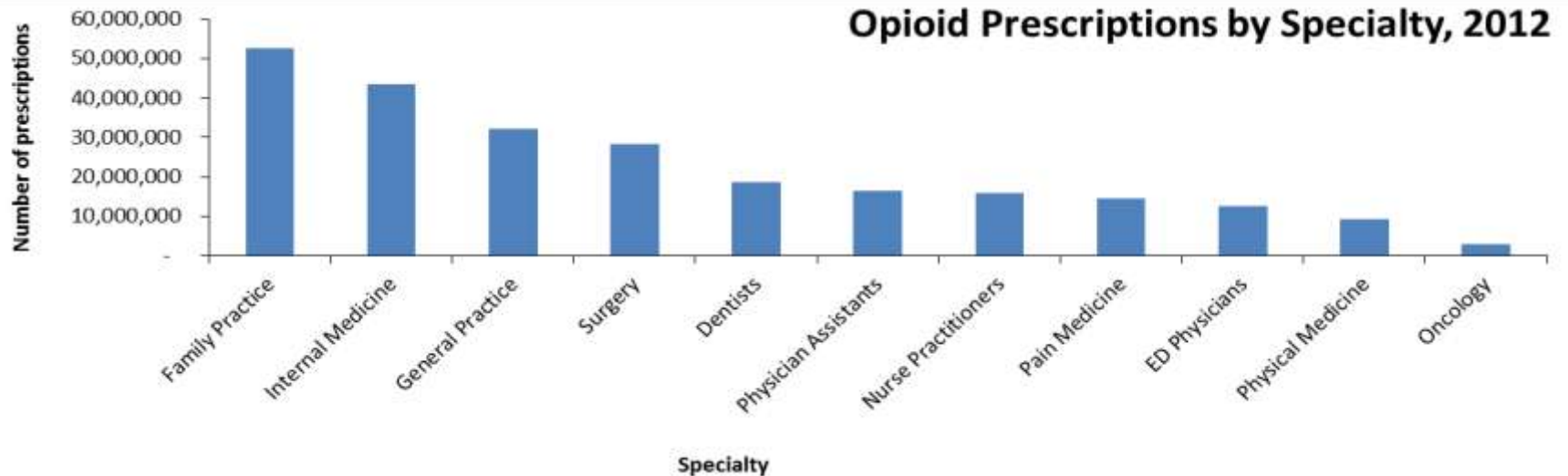
3 Percent Prescribe. . .

55% of CSII opioid Rx

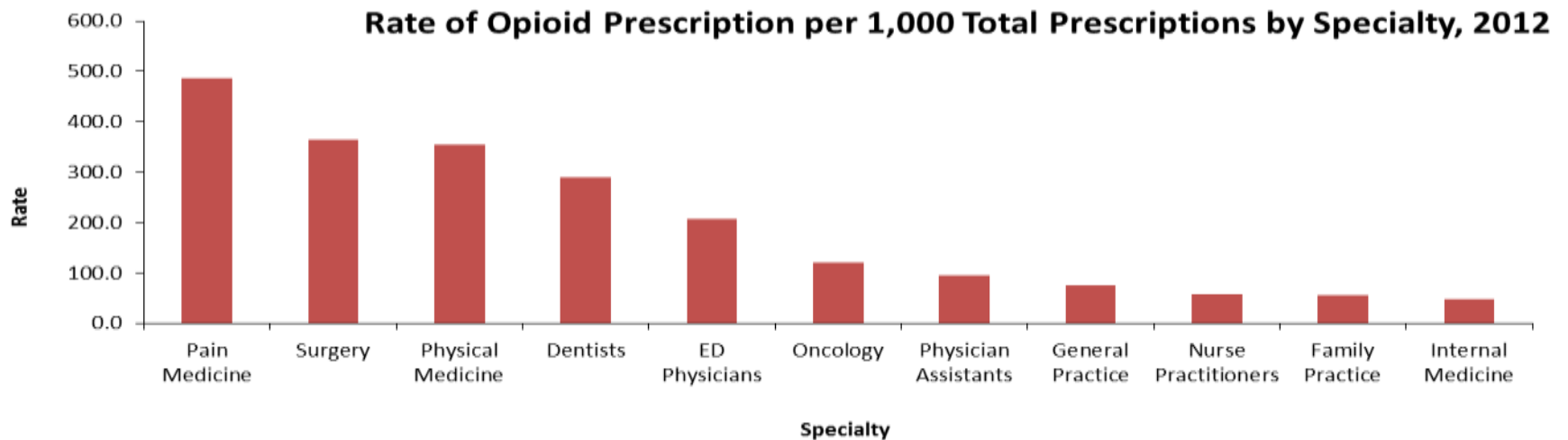
62% of morphine equivalents

65% of associated payments

Primary care providers prescribe the most opioids

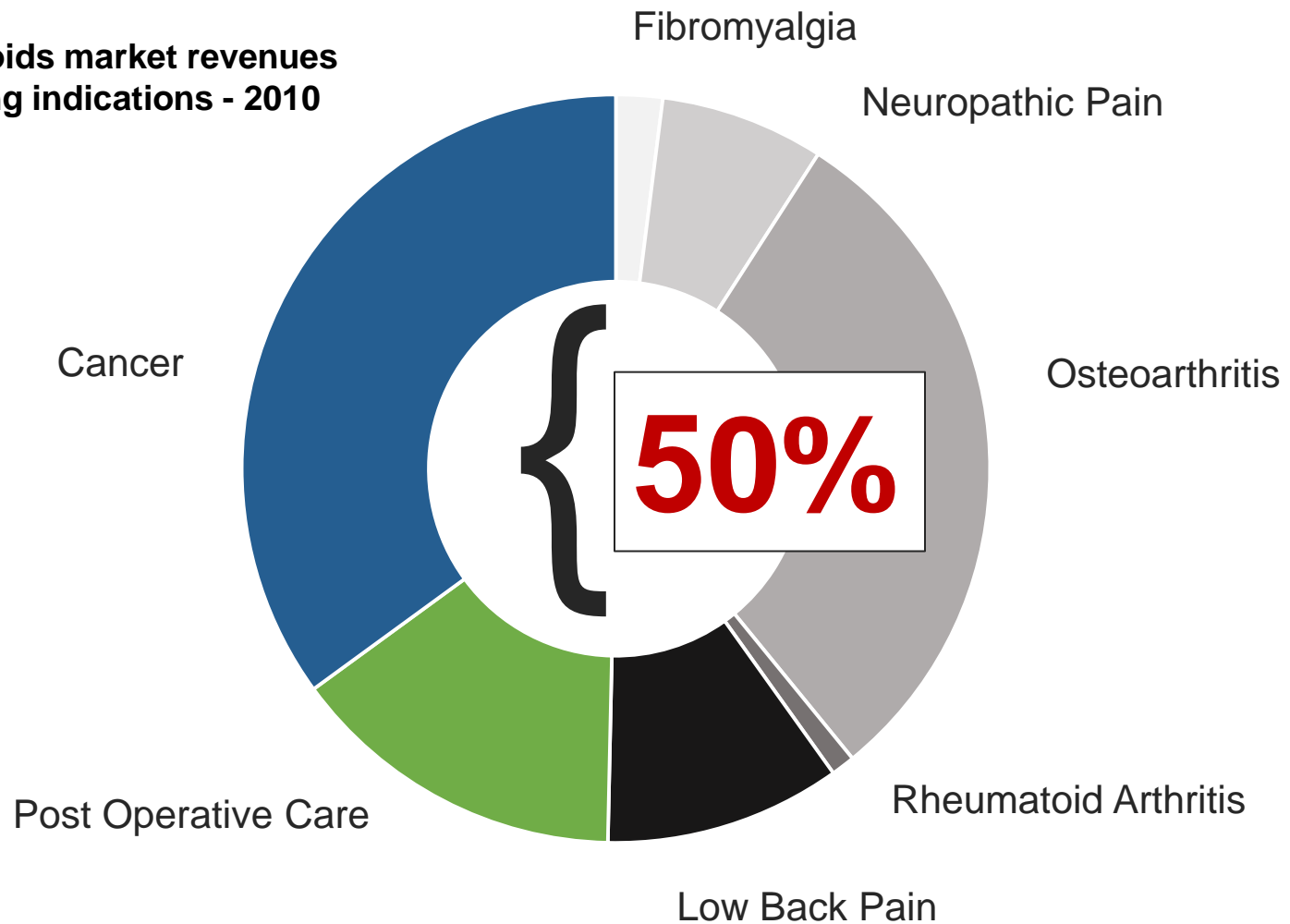


Pain specialists prescribe opioids most frequently



Half of US Opioids Market is Treatment for Chronic, Non-Cancer Pain

U.S. opioids market revenues
7 leading indications - 2010



Who is at risk for an overdose?

Risk Factors

- Patients receiving opioids from multiple prescribers and/or pharmacies
- Patients taking high daily doses of opioids



Demographics

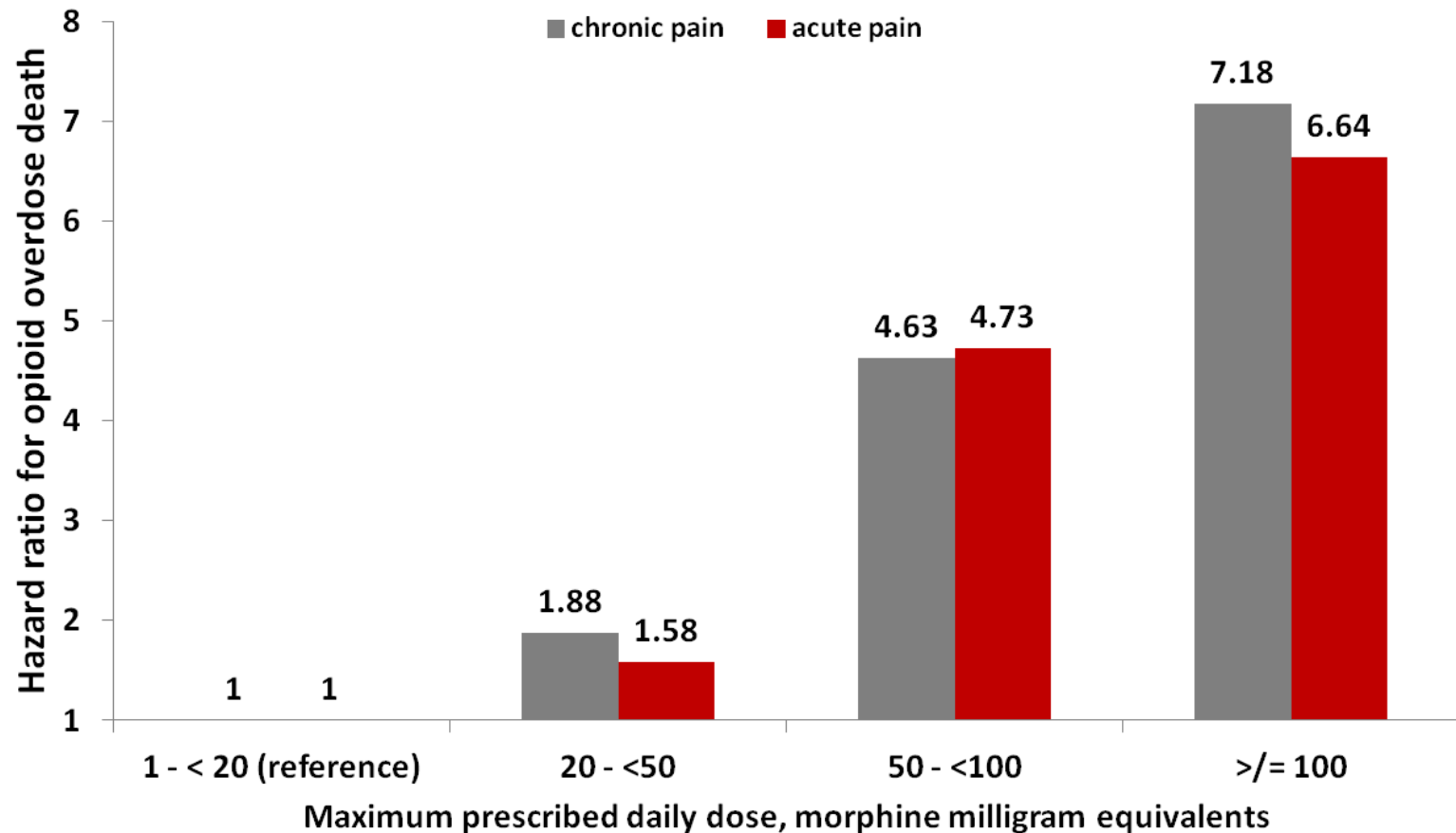
- Men
- 35-54 year olds
- Whites
- American Indians/Alaska Natives

Socioeconomics & geography

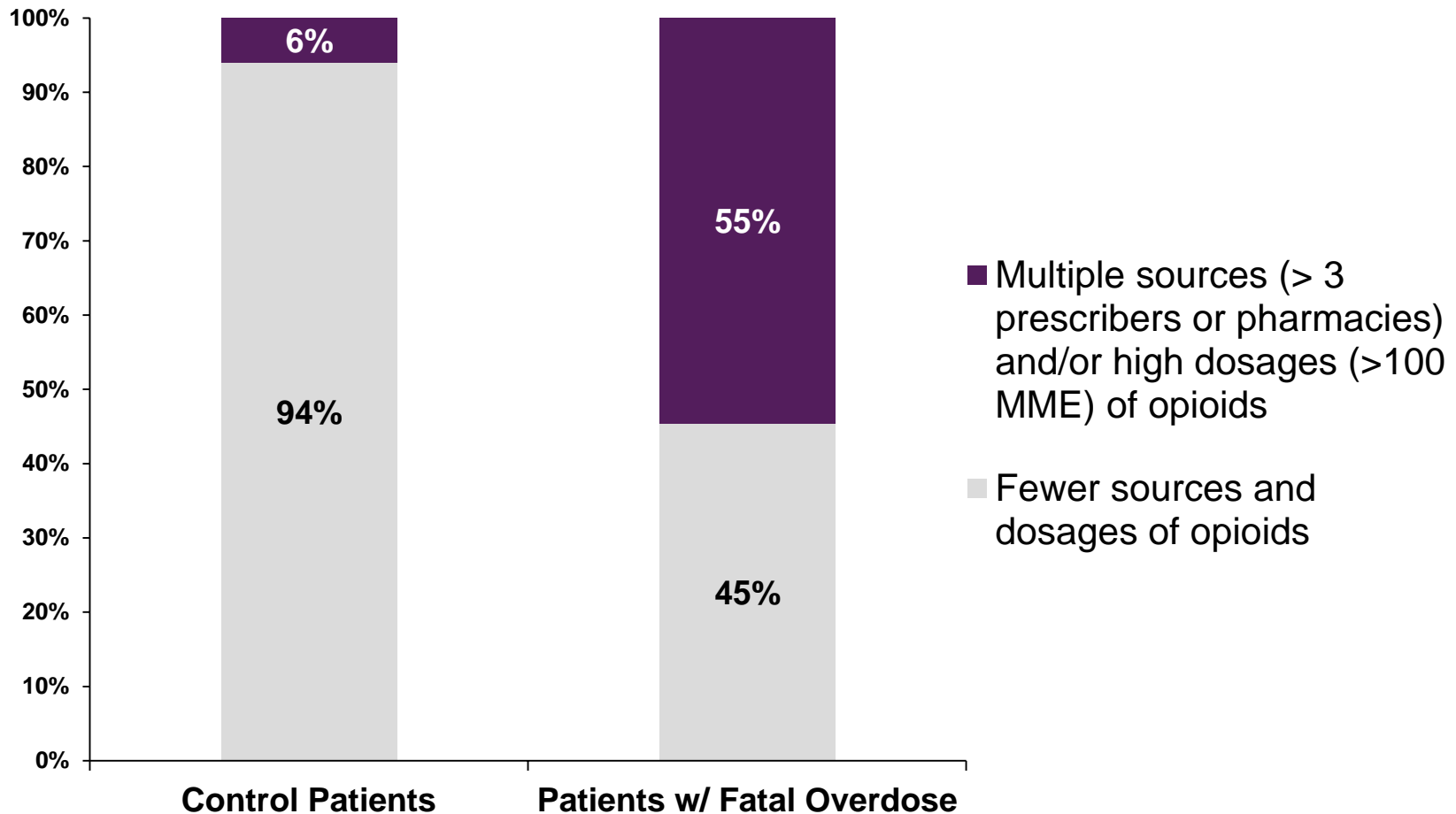
- Medicaid
- Rural

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Association Between Opioid Prescribing Patterns and Opioid Overdose-Related Deaths

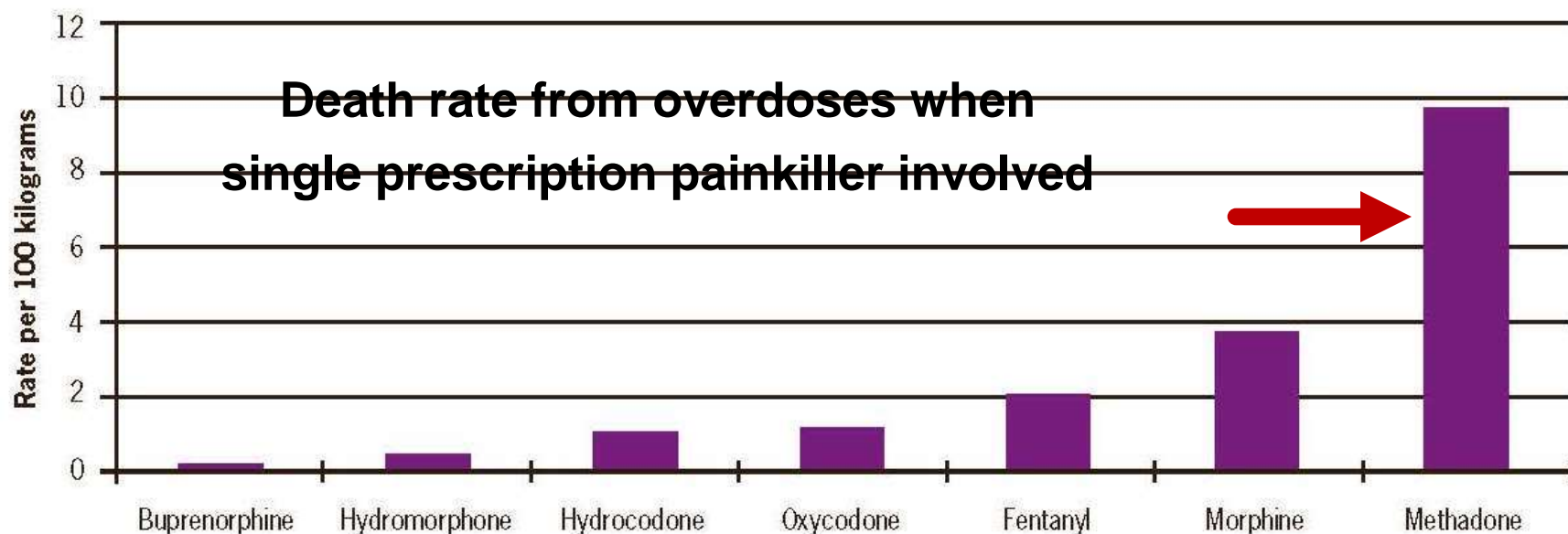


Majority of opioid overdose deaths associated with multiple sources and/or high dosages



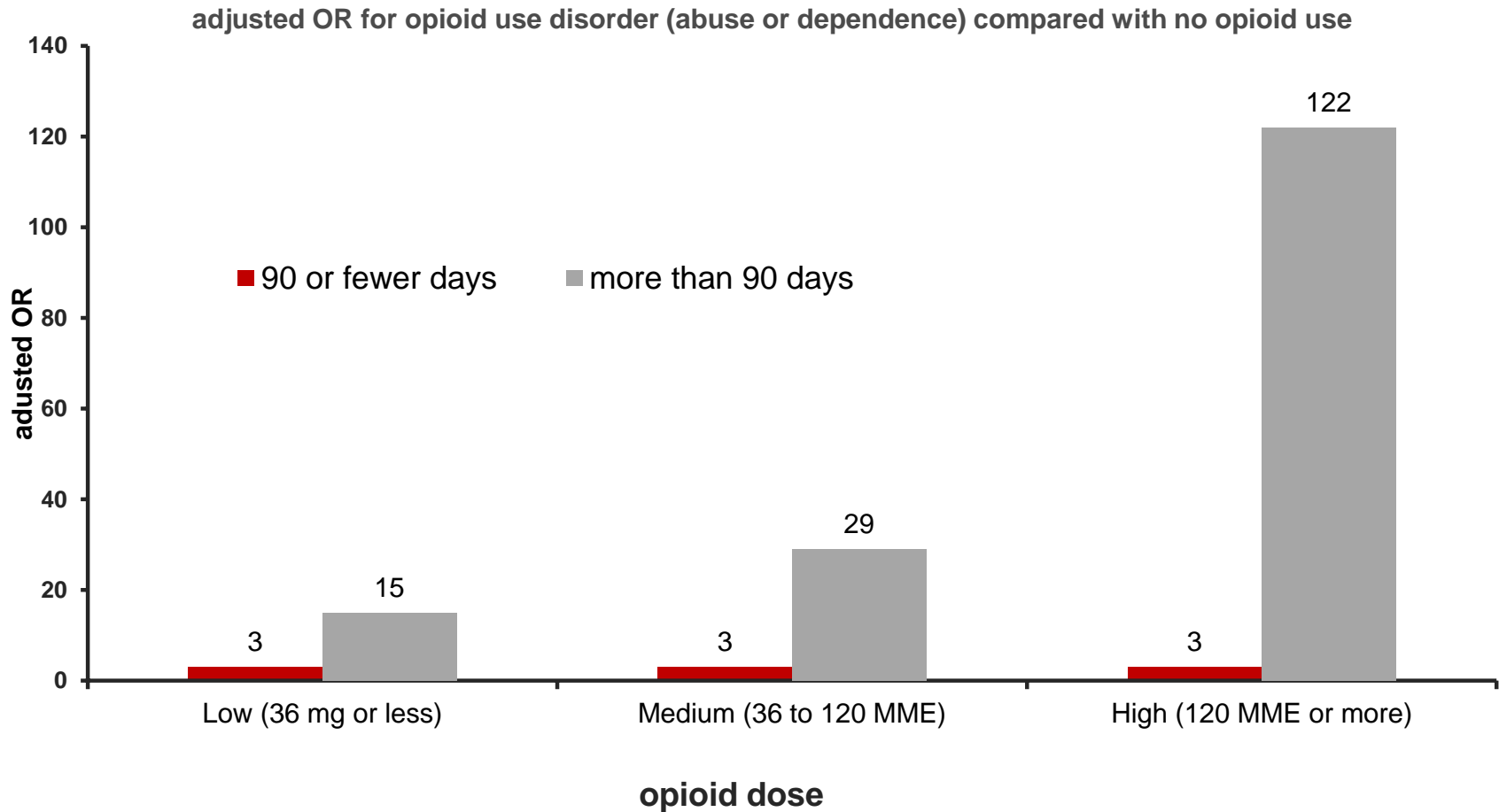


Methadone contributes to largest fraction of opioid-related deaths



Source: Substance Abuse and Mental Health Services Administration, Center for Behavioral Statistics and Quality, Drug Abuse Warning Network Medical Examiner Component, 2009.

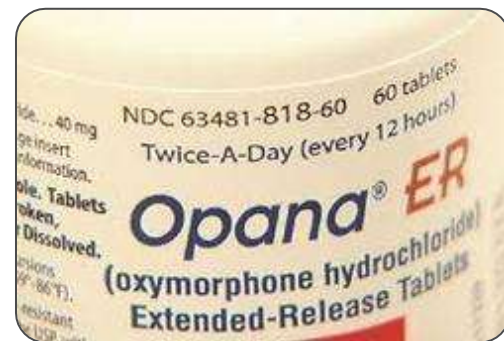
Longer durations and higher doses of opioid treatment are associated with opioid use disorder



HIV and HEP C Outbreak

2015

- 135 new HIV infections diagnosed in town of 4,200 people – Austin, Indiana.
- Co-infection with hepatitis C virus in 84% of patients
- Spread by Injection Drug Users using OPANA. Daily injections ranged from 4 to 15.
- Average of nine syringe-sharing partners, sex partners, or other social contacts
- Reported number of injection partners ranged from 1 to 6 per injection event



SOURCE: Conrad, C. et al. (2015). Community outbreak of HIV infection linked to injection drug use of oxymorphone—Indiana, 2015. MMWR Morb Mortal Wkly Rep, 64(16), 443-444..

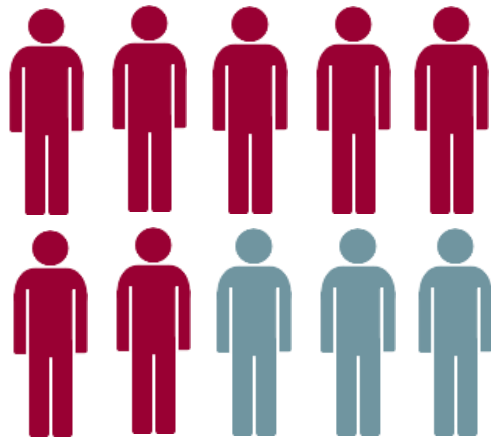
A close-up photograph showing a hand holding a medical syringe. The syringe is tilted, and its needle is inserted into a spoon that contains a yellow liquid. In the background, there is a pile of white powder on a dark surface. The text "Trends in Heroin Use & Health Outcomes" is overlaid on the left side of the image.

Trends in Heroin Use & Health Outcomes

Prescription opioid misuse is a major risk factor for heroin use

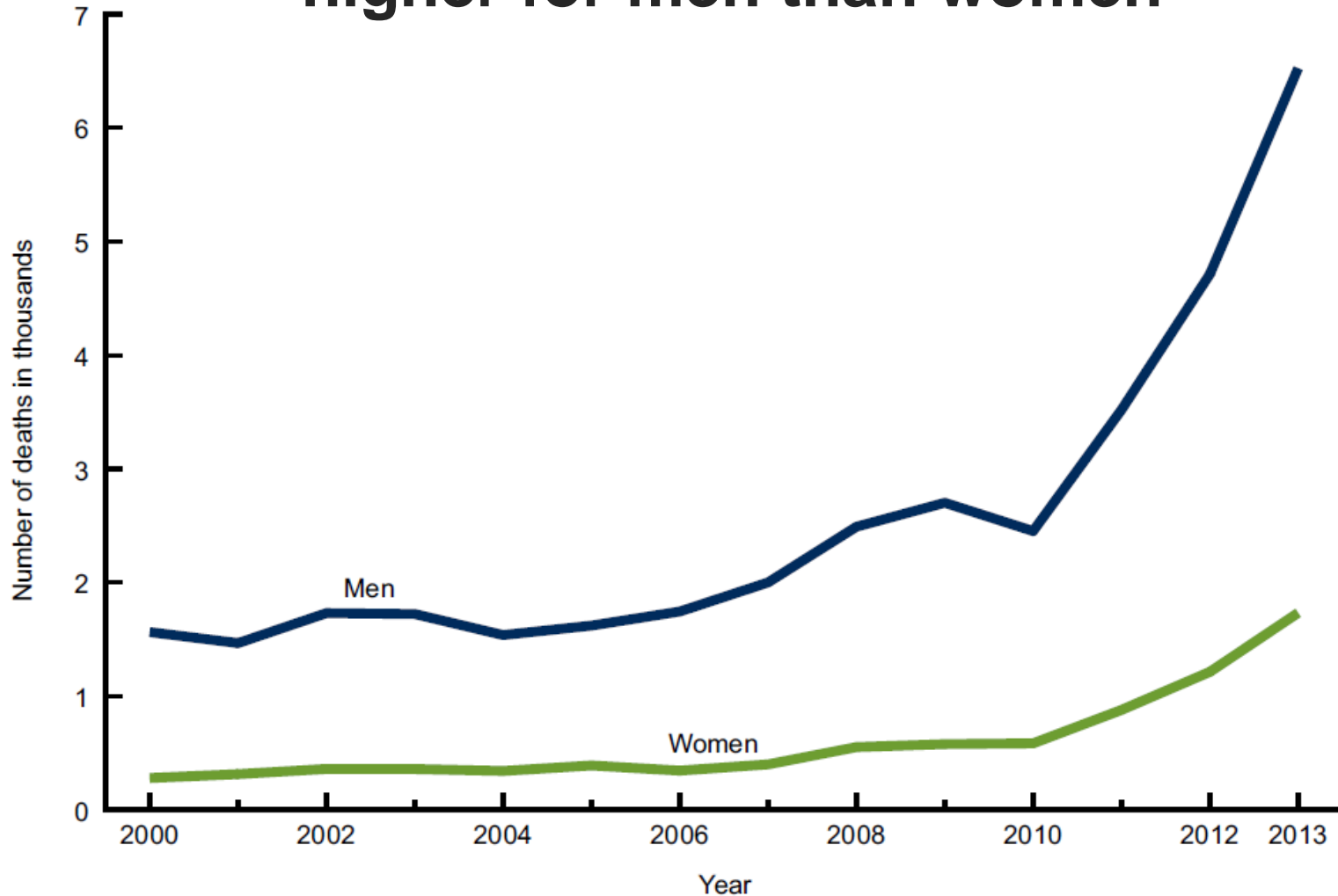


3 out of 4 people
who used heroin in the
past year misused
opioids first



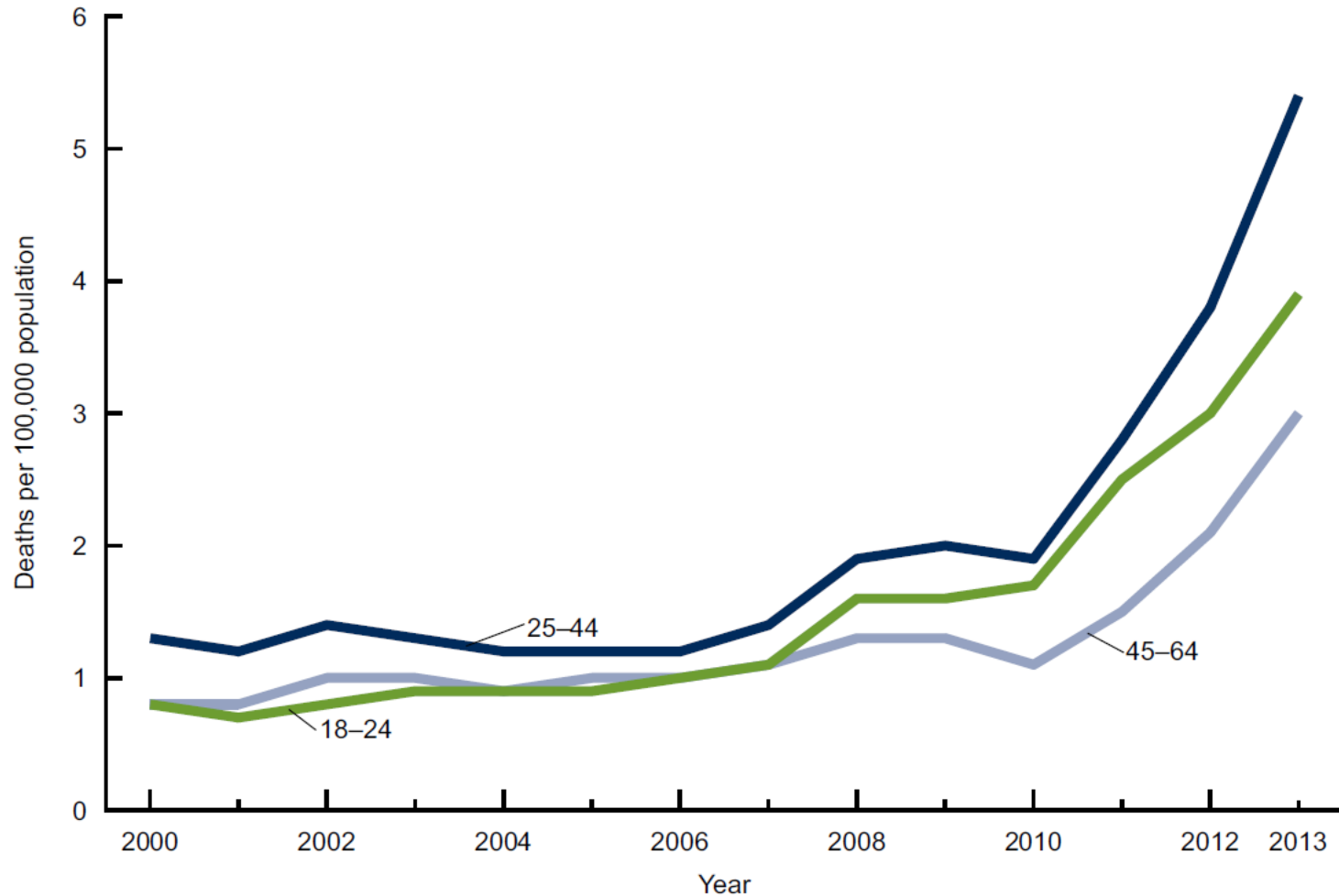
7 out of 10 people
who used heroin in the
past year also misused
opioids in the past year

Heroin overdose deaths nearly four times higher for men than women



CDC/NCHS, National Vital Statistics System, Mortality.

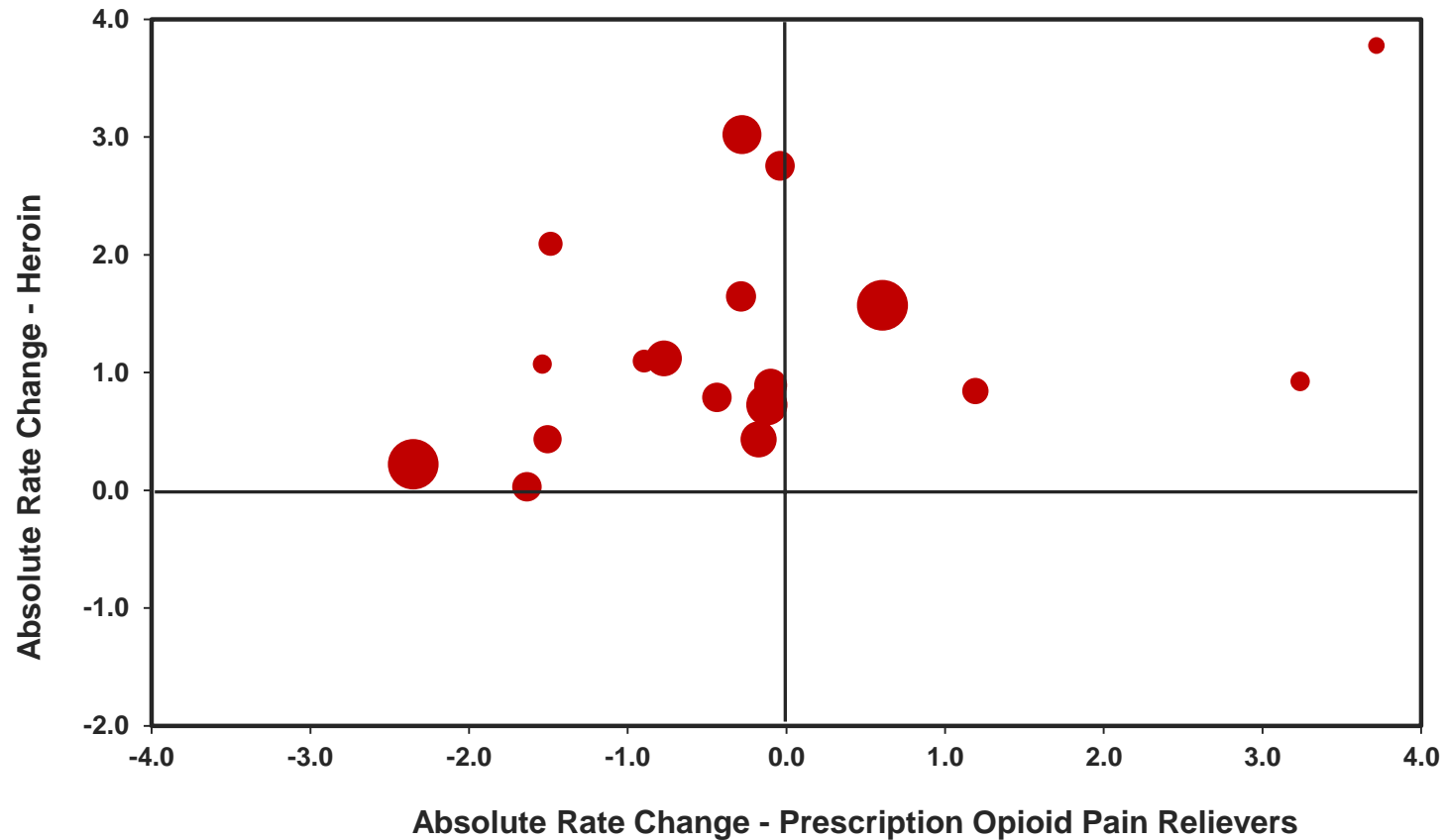
Adults age 25-44 have the highest rate of heroin overdose



CDC/NCHS, National Vital Statistics System, Mortality.

Recent increase in heroin overdose deaths are not associated with decreases in Rx opioid deaths

18 States - 2010-2012



JULY 2015

^{CDC}
*Vital*signs™

Today's Heroin Epidemic

Release Date
July 7, 2015



Two groups of people with two different sets of needs

Addicted/Dependent



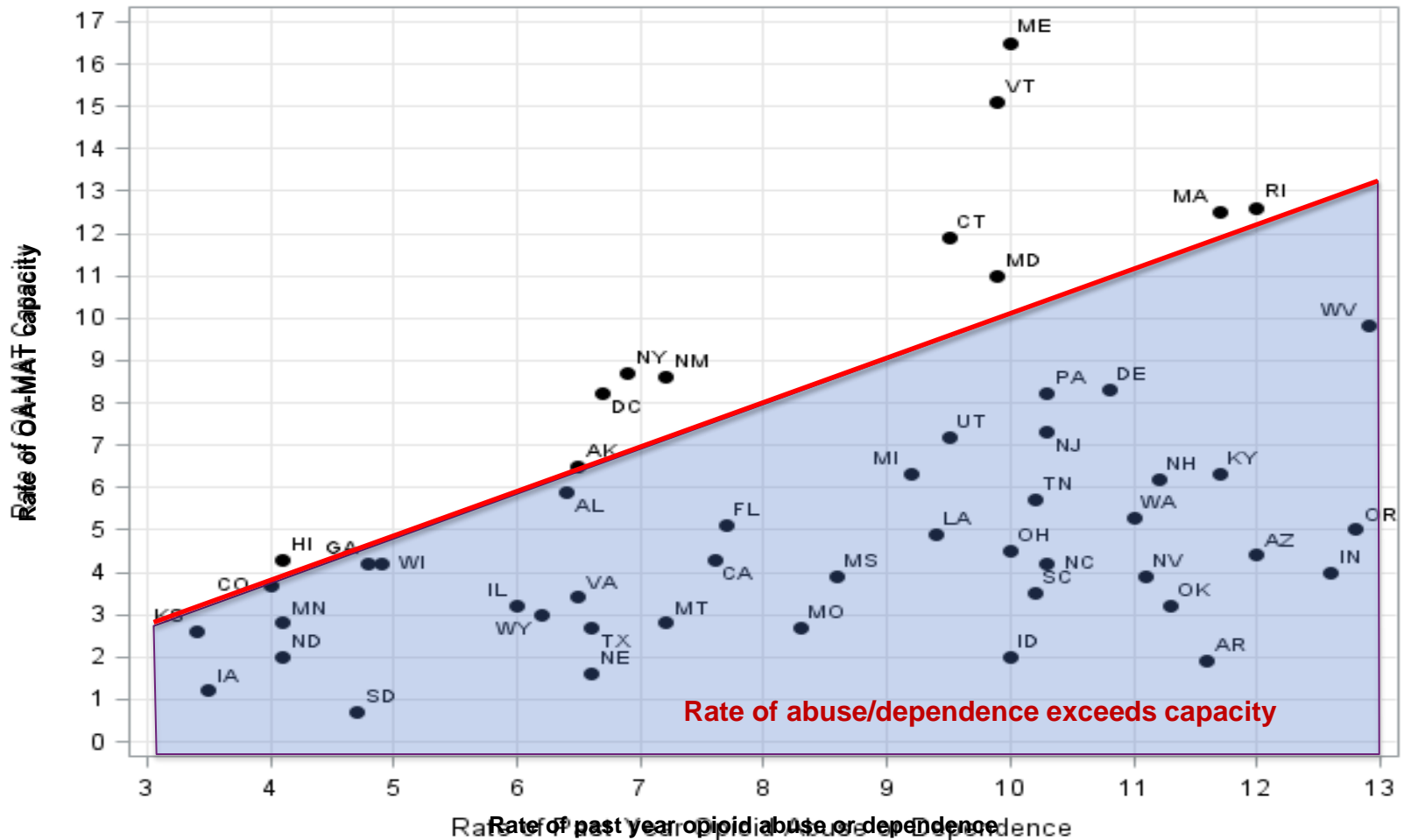
**Need access
to services**

At risk for addiction/dependence



**Protect from
dangerous drugs**

Opioid Abuse and Dependence exceeds Medication-Assisted Treatment Capacity in most States



Jones, C. M., Campopiano, M., Baldwin, G., & McCance-Katz, E. (2015). National and State Treatment Need and Capacity for Opioid Agonist Medication-Assisted Treatment. *American Journal of Public Health*, (0), e1-e9.

Three Pillars of CDC's Prescription Drug Overdose Prevention Work

- **Improve data** quality and track trends
- **Strengthen state efforts** by scaling up effective public health interventions
- **Supply healthcare providers with resources** to improve patient safety





CDC
**CENTERS FOR DISEASE
CONTROL AND PREVENTION**

**EDWARD R. ROYBAL
CAMPUS**

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Special thanks to Noah Aleshire for his assistance preparing this presentation